

Express Mail Label No.: EV308900476US
Date of Deposit: June 23, 2004

ATTORNEY'S DOCKET NO.: M1003-7002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No: 09/938,229
Confirmation No: 1859
Filed: August 23, 2001
For: TIGHTLY WOVEN PAPER TEXTILE PRODUCTS
Examiner: John J. Guarriello
Art Unit: 1771

Mail Stop Appeal Brief—Patents
P.O. Box 1450
Commissioner for Patents
Washington, D.C. 22313-1450

APPELLANTS' BRIEF PURSUANT TO 37 C.F.R. § 1.192

This brief, submitted in triplicate, and fee of \$165 for a small entity under 37 C.F.R. § 1.17(c), are submitted in furtherance of the Notice of Appeal filed on February 23, 2004 in the above-referenced application.

A petition and fee for a two month extension of time also is enclosed herewith. Any additional fees required for consideration of this paper are authorized to be charged to the deposit account identified on the two copies of the Transmittal of Appeal Brief filed herewith.

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TABLE OF CONTENTS

I.	Real Party in Interest (37 C.F.R. §1.192(c)(1))	3
II.	Related Appeals and Interferences (37 C.F.R. §1.192(c)(2))	3
III.	Status of Claims (37 C.F.R. §1.192(c)(3)).....	3
IV.	Status of the Amendments (37 C.F.R. §1.192(c)(4)).....	3
V.	Summary of the Invention (37 C.F.R. §1.192(c)(5))	4
VI.	Issues (37 C.F.R. §1.192(c)(6))	4
VII.	Grouping of Claims (37 C.F.R. §1.192(c)(7))	5
VIII.	Argument (37 C.F.R. §1.192(c)(8)(iv))	5
	A. Discussion of the Prior Art	5
	B. The Rejections of the Group I Claims Should Be Reversed.....	5
	C. The Rejections of the Group II Claims Should Be Reversed.	9
	D. The Rejections of the Group III Claims Should Be Reversed.	9
	E. The Rejections of the Group IV Claims Should Be Reversed.....	10
	F. The Rejections of the Group V Claims Should Be Reversed.	11
IX.	Conclusion	12
X.	Appendix: Claims as Appealed (37 C.F.R. §1.192(c)(9))	13

I. Real Party in Interest (37 C.F.R. §1.192(c)(1))

The real party in interest in this application is the assignee, Merida Meridian, Inc., a New York corporation with a place of business at 643 Summer Street, Boston, Massachusetts 02210.

II. Related Appeals and Interferences (37 C.F.R. §1.192(c)(2))

There are no other appeals or interferences known to the appellant, the appellant's legal representatives, or the assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims (37 C.F.R. §1.192(c)(3))

Claims 1-10 are pending in this application, of which claims 1 and 4 are independent claims. Each of these claims was finally rejected in an Office Action dated October 22, 2003. The rejection claims 1-8 and 10 is appealed. The rejection of claim 9 is not appealed. A copy of the claims, as pending, is attached as an Appendix.

The status of the claims is as follows:

- A. Claims 1, 4-6, and 10 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 280,286 to Bray, hereinafter "Bray."
- B. Claims 1-3, 7, 8, and 10 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious over Bray.
- C. Claim 9 stands rejected for nonstatutory double patenting. Applicant filed a terminal disclaimer to obviate the rejection, but the disclaimer was apparently misplaced by USPTO. Rather than filing another disclaimer, applicant has chosen to accede to the rejection of claim 9.

IV. Status of the Amendments (37 C.F.R. §1.192(c)(4))

No amendments have been filed subsequent to the Final Office Action. The claims as submitted in the Appendix are the claims as filed; no amendments have been made during the course of prosecution.

V. Summary of the Invention (37 C.F.R. §1.192(c)(5))

The invention involved in this Appeal is directed generally to a textile material and a method of making a textile material.

The material comprises a first set of paper yarns in a warp direction tightly woven with a second set of paper yarns in a substantially perpendicular weft direction. “Tightly woven” refers to a relatively high density of yarns in the warp and weft directions. (Application, p. 4.) A low density of paper yarns would result in a loosely woven material, such that relatively large gaps and spaces result between individual yarns. (Id.) A “tightly woven” fabric leaves gaps sufficiently small that a liquid backing may be applied, such as applying a latex backing. (Id.) In one embodiment, a tightly woven product comprises a density of the first set of yarns (warp direction) of at least about 6 ends/in. (Id.) In another embodiment, a tightly woven fabric comprises a density of the second set of yarns (weft direction) of at least about 6 picks/in. and more preferably at least about 10 picks/in. (Id.)

The method of making a textile material involves forming a fabric by weaving paper yarns on a wide loom. (Application, p. 9, ll. 4-11.) The method may also include additional steps, including wetting the paper and twisting it prior to weaving, weaving immediately after twisting, supplying the yarns to the loom at a controlled tension, and cutting the woven yarns to form a rug. (Id.)

VI. Issues (37 C.F.R. §1.192(c)(6))

A. Whether the rejections of claims 1, 4-6, and 10 as allegedly being anticipated by Bray should be reversed, when Bray completely fails to disclose at least one feature in each of the claims.

B. Whether the rejections of claims 1-3, 7, 8, and 10 as allegedly being obvious over Bray alone should be reversed, when Bray completely fails to disclose or suggest at least one feature in each of the claims, the Examiner fails to identify a specific motivation or suggestion in the prior art to modify Bray to include all of the missing features, and the Examiner fails to identify any reasonable expectation of success in modifying Bray.

VII. Grouping of Claims (37 C.F.R. §1.192(c)(7))

A. Group I. For purposes of this appeal only and for the rejections under 35 U.S.C. §§ 102 and 103, claims 1 and 5 stand or fall together. Claim 1 is representative.

B. Group II: For purposes of this appeal only and for the rejections under 35 U.S.C. §§ 103, claims 2 and 3 stand or fall together. Claim 2 is representative.

C. Group III. For purposes of this appeal only and for the rejections under 35 U.S.C. §§ 102, claims 4 and 8 stand or fall together. Claim 4 is representative.

D. Group IV. For purposes of this appeal only and for the rejections under 35 U.S.C. §§ 102 and 103, claims 6 and 7 stand or fall together. Claim 6 is representative.

E. Group V. For purposes of this appeal only and for the rejections under 35 U.S.C. §§ 102 and 103, claim 10 stands alone.

VIII. Argument (37 C.F.R. §1.192(c)(8)(iv))

Applicant respectfully requests that the Examiner's final rejection of claims 1-8 and 10 be reversed. The claims as presented are believed to be in allowable condition.

A. Discussion of the Prior Art

Bray discloses a paper mat or carpet in which paper is formed into strips, twisted, and then woven or knit to form the mat or carpet. The mat or carpet is preferably rendered waterproof by saturation or impregnation with a waterproofing material. (Col. 1, ll. 30-34.) In an alternative embodiment, the mat or carpet is not waterproofed but is instead formed of "tightly twisted" strands that are "closely woven or knit" so that the mat or carpet can be "subjected to a moderate amount of washing without liability of injuring the same." (Col. 1, ll. 42-49.) Bray is nothing more than an example of the type of prior art woven papers that are disclosed in the Application and illustrated in Figs. 1 and 2 of the Application.

B. The Rejections of the Group I Claims Should Be Reversed.

The Final Office Action rejected Group I claims 1 and 5 under 35 U.S.C. § 102(b) as being anticipated by Bray and Group I claim 1 under 35 U.S.C. § 103(a) as being obvious over Bray. These rejections should be reversed.

1. Bray Does Not Anticipate the Group I Claims.

Applicant respectfully submits that Bray does not anticipate the Group I claims because Bray does not disclose a “tightly woven” paper fabric (claim 1), or a method of weaving a paper fabric where the paper yarns are tightly woven (claim 5), as that term is used in the patent application.

As described on page 4 of the application, by “tightly woven” it is meant that the paper yarns of the claims are woven so as to leave gaps sufficiently small that a liquid backing may be applied to only one side of the material, i.e., such that a liquid backing would not bleed through the material. Bray simply does not disclose this, either expressly or inherently.

As far as express disclosure is concerned, while the paper mat of the 1883 Bray patent is perhaps sufficiently “closely woven or knit” that it is not destroyed by washing, that is a very different thing than a paper mat that is sufficiently “tightly woven” for a liquid backing to be applied and not bleed through. Applicant respectfully submits that a mat that is simply washable is not “tightly woven” as that term is used in the present application. There is nothing in Bray or elsewhere in the prior art that would make Bray’s “closely woven” synonymous with the claimed “tightly woven.”

Quite the contrary, a “tightly woven” mat (i.e., one that would not allow a liquid backing to bleed through) would be inconsistent with the teaching of Bray. Bray teaches (1) to impregnate the material with a waterproofing agent, and (2) that the purpose of this is to permit washing. Both are inconsistent with a “tightly woven” mat (i.e., one that would not allow a liquid backing to bleed through).

For the first, in Bray, the material surrounding the interstices between the paper yarn would not (or would be much less likely to) be “saturated” with a waterproofing material if woven so tightly that a liquid backing would not bleed through.

For the second, a mat is much more washable if water can pass through the interstices—otherwise dirt could be trapped and difficult to remove.

As a result, it would be most unfair to read Bray’s teaching, that the mat be woven tight enough that it will not fall apart when it is washed, as meaning that the carpet is woven so tight that a liquid backing could not bleed through at all.

Quite the contrary, there is no reason to believe that Bray's teaching (tight enough to wash without disintegrating) goes so far as to teach a higher level of tightness—tight enough so that it not only will not disintegrate but also tight enough that a liquid backing will not pass through it. What is more, increasing the tightness to this level appears contrary to two of Bray's teachings—that the yarn be impregnated with waterproofing material (which requires a loose enough weave for the material to get in the interstices) and that the material be washable (something made easier without the tighter weave).

It is also manifest that a “tightly” woven fabric is not inherently disclosed in Bray. To be “inherent,” an element must necessarily have been present in the prior art reference. See, e.g., In re Robertson, 169 F.3d 743 (1999). There is no suggestion in the Final Office Action (nor would it be appropriate to assert) that a “tightly woven” fabric that would allow a liquid backing is a necessary consequence of weaving a fabric sufficiently close so as to allow washing in the year 1883.

Regarding the Office Action's statement that the term “tightly woven” is “merely a subjective term which is not specified with any quantative value,” the Applicant disagrees. As explained in the specification, “tightly woven,” in this application, means that the “fabric leaves gaps sufficiently small that a liquid backing may be applied, such as applying a latex backing.” (Application, p. 4.)

As Bray clearly does not disclose every limitation of the Group I claims, it is requested that this § 102 rejection be withdrawn.

2. The Group I Claims are Not Obvious In View of Bray.

The Final Office Action also rejected Group I claim 1 under 35 U.S.C. § 103(a) as being obvious in view of Bray. This rejection also should be reversed.

As set forth in MPEP § 2143, three criteria must be met in order to establish a prima facie case of obviousness. First, the reference(s) must teach or suggest all of the claimed features. Second, there must be some specific suggestion or motivation, either in the cited reference(s) or in the knowledge generally available to one of ordinary skill in the art, to modify the reference(s). Third, there must be a reasonable expectation of success. The specific teaching or suggestion to modify the reference(s), as well as the reasonable expectation of success, must both

be found in the prior art and not based on Applicants' disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In the present application, the Final Office Action fails to establish any of these elements and therefore has not made out a prima facie case of obviousness.

First, Bray fails to disclose or suggest one or more features of each of the Group I claims, namely the "tightly woven" aspect, as described in the foregoing section. While Bray teaches that a "closely" woven paper material may be washable without being destroyed, there is no teaching in Bray that in any way quantifies "closely" or could equate "closely" with "tightly," and certainly not as "tightly" is defined in the specification of the present application—a term specifically characterized by the applicant both in terms of the ability to apply a liquid backing and, in dependent claims 2 and 3, in terms of particular densities.

Second, the Final Office Action has completely failed to point to any specific motivation or suggestion in the prior art to modify the cited Bray reference to provide the missing claim elements. To support an obviousness rejection, there must be a specific motivation to change the prior art to fall within the scope of the claims. In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999) (reversing rejection because specific motivation in the prior art not identified). Without a clear and particular identification of a suggestion, teaching, or motivation in the prior art to modify a reference, the rejection cannot be maintained. Id. (emphasis added).

As noted above, Bray discloses a paper mat or carpet, one embodiment of which has strands that are "closely woven or knit" so that the mat or carpet can be "subjected to a moderate amount of washing without liability of injuring the same." (Col. 1, ll. 42-49.) There is no teaching that further increasing the density of the Bray weave will improve washability. In other words, all one of skill in the art would take from Bray would be that a "close" weave would be sufficient to achieve washability; there is no absolutely teaching or suggestion that an even tighter weave would make the material more washable. Thus, there is no teaching or suggestion to modify the "closely" woven paper material of Bray to arrive at the inventive "tightly" woven material.

Finally, there is no evidence in Bray, or elsewhere, that there would be any reasonable expectation of success in modifying Bray to be tightly woven. It is equally possible, for

example, that increasing the density of the Bray weave would make the fabric less washable by creating tight spaces in which dirt or other debris could become trapped.

The Final Office Action has failed to satisfy each of the three elements required to establish a prima facie case of obviousness. Because failure to meet any one of these elements is sufficient to render such a rejection improper, the rejection is plainly erroneous. It is respectfully submitted that claim 1 is patentable over Bray and that the § 103(a) rejection of that claim should be reversed.

C. The Rejections of the Group II Claims Should Be Reversed.

The Final Office Action rejected Group II claims 2 and 3 under 35 U.S.C. § 103(a) as being obvious in view of Bray. There is no § 102 rejection of these claims. These rejections should be reversed.

Claims 2 and 3 are not obvious in view of Bray for the same reasons that claim 1 is not: the “tightly woven” feature is not present in Bray, there is no teaching or suggestion in the prior art to make the modification, and there is nothing in the prior art that would provide a reasonable expectation of success in making the modification. See Section VIII.B.2. There is also no teaching or suggestion of the specific densities recited in these claims.

Regarding the Final Office Action’s statement that the term “tightly woven” is “merely a subjective term which is not specified with any quantitative value,” Applicant disagrees, as explained above. Furthermore, Applicant notes that the Group II claims specifically recite the density of the weave in terms of the numbers of yarns per inch. Thus, even if “tightly woven” is not sufficiently quantified in claim 1, it is most assuredly quantified in claims 2 and 3.

D. The Rejections of the Group III Claims Should Be Reversed.

The Final Office Action rejected claim 4 under 35 U.S.C. § 102(b) as being anticipated by Bray and claim 8 as being obvious in view of Bray. For the reasons stated below, these rejections should be reversed.

1. Bray Does Not Anticipate the Group III Claims.

Applicant respectfully submits that Bray does not anticipate the Group III claims because Bray does not disclose weaving paper yarns on a wide loom.

It is clear that Bray does not expressly or inherently disclose the step of weaving a paper fabric on a wide loom. There is no mention of a wide loom at all. Bray says only that the

threads “are woven or knit into a fabric by any of the well-known methods practiced in weaving or knitting textile material.” (Col. 1, ll. 26-30.) But there is nothing other than conjecture in the Final Office Action to indicate that the use of a wide loom would be “conventional” method of weaving a paper fabric in 1883. In fact, the Application makes clear that it would not have been conventional: prior art woven paper materials like those of Bray would not be produced on wide looms, i.e., in large sheets, and then cut into smaller sizes because any such cutting would result in frayed edges and loose ends. (Application, pp. 8-9.) The teachings of Bray confirm this, as Bray teaches to weave the material into its final shape, which is not what one would ordinarily do on a wide loom. (See col. 2, ll. 61-64 (quoted below).)

Indeed, one feature of certain embodiments of the Applicant’s invention (that makes sense to use a wide-loom in the context of the present application, but not the context of Bray) is that it overcomes the problem of fraying because the novel, tight weave of the inventive material results in a paper fabric that easily accepts a backing and thus is suitable for being woven on a wide loom and then cut into smaller pieces for use as area rugs and the like.

As weaving paper yarns on a wide loom is neither explicitly not inherently disclosed in Bray (presumably because the disclosed material would not have been suitable for weaving on a wide loom), it cannot anticipate the claims of Group III. Claim 8, which depends from claim 4, is patentable for the same reasons.

E. The Rejections of the Group IV Claims Should Be Reversed.

The Final Office Action rejected claim 6 under 35 U.S.C. § 102(b) as being anticipated by Bray and claim 7 under 35 U.S.C. § 103(a) as being obvious over Bray. These rejections should be reversed.

Bray does not anticipate claim 6 because it does not disclose, either expressly or inherently, preparing the yarns by twisting wetted paper. While Bray does teach the use of twisted paper (albeit not in a tightly woven material), Bray does not teach the step of twisting wetted paper, which is a significant step because it facilitates the inventive tight weave. Indeed, without a teaching of twisting wetted paper, it is doubtful that Bray could have achieved a “tightly woven” (as used in the patent application) mat, even had he wanted to do so (there is no evidence or suggestion, however, that he did). The step of twisting wetted paper clearly is not inherent in Bray because it is not necessary to the disclosed method.

As a result, Bray cannot anticipate claim 6. Claim 7, which depends from claim 6, is patentable for the same reasons.

F. The Rejections of the Group V Claims Should Be Reversed.

The Final Office Action rejected claim 10 under 35 U.S.C. § 102(b) as being anticipated by Bray and under 35 U.S.C. § 103(a) as being obvious in view of Bray. These rejections should also be reversed because Bray does not teach a step of “cutting the woven yarns to form a rug,” the prior art does not contain a suggestion to modify Bray to add this step, and there would have been no reasonable expectation of success of doing so.

While the Final Office Action cites column 2, lines 60-64 for the proposition that Bray teaches to cut to shape, the cited portion of Bray actually teaches otherwise. According to Bray:

I also weave or knit the fabric into any determined dimensions to be fitted to the floor of an apartment, so that the floor covering will be in a single piece.

(Col. 2, ll. 61-64 (emphasis added).) Bray thus teaches to weave the carpet directly into its final dimensions, which is exactly the opposite of weaving the fabric larger than needed and then cutting it down to size. The reason for these teachings is described above, namely that the fabric of Bray would not have been sufficiently tightly woven to allow it to be cut without fraying. Bray accordingly cannot anticipate claim 10.

It also would not have been obvious to modify Bray to add the step of cutting to size, because (a) Bray already addressed this issue by suggesting that the material be woven to size (apparently because cutting to size would not have worked in the loosely woven prior art fabrics), (b) there is nothing in the cited art that would provide a motivation to make this modification, and (c) there is nothing that would indicate any reasonable expectation of success.

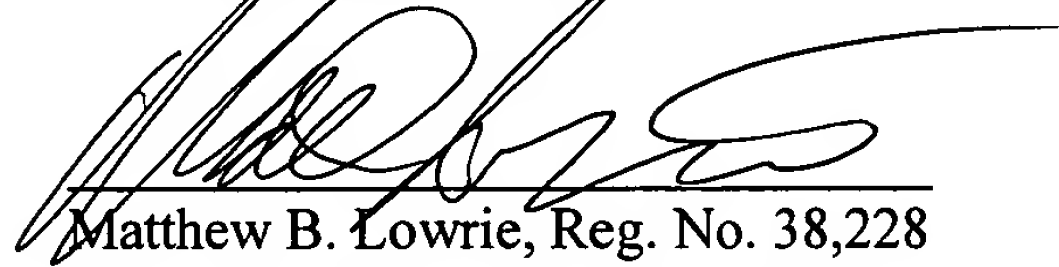
In short, as noted, Bray actually teaches away from a cutting step, describing a fabric that is woven to its final dimensions. The assertion in the Final Office Action, that the cutting step is “routine skill in the art,” fails to account for the fact that, as described in the Application, Bray was not tightly woven and therefore could not have been cut to size without an unacceptable amount of fraying.

Accordingly, the § 102 and § 103 rejections of claim 10 should be reversed.

IX. Conclusion

For the foregoing reasons, each of the rejections of the claims was improper and should be reversed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Matthew B. Lowrie', is written over a horizontal line.

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Date: June 23, 2004

Attorney Docket No.: M1003-7002

X. Appendix: Claims as Appealed (37 C.F.R. §1.192(c)(9))

Claims 1-10 are pending in the application and stand rejected. The rejections of claims 1-8 and 10 are appealed.

1. A fabric comprising:
a first set of paper yarns in a warp direction; and
a second set of paper yarns tightly woven with the first set of yarns in a substantially perpendicular weft direction.
2. The fabric of claim 1, wherein each set of yarns has a density such that a sum of each density is at least about 20 yarns/in.
3. The fabric of claim 1, wherein each set of yarns has a density of at least about 6 yarns/in.
4. A method of weaving a paper fabric, comprising
providing paper yarns; and
weaving the paper yarns on a wide loom.
5. The method of claim 4, wherein the paper yarns are tightly woven.
6. The method of claim 4, wherein the yarns are prepared by twisting wetted paper.
7. The method of claim 6, wherein the weaving occurs immediately after twisting.
8. The method of claim 4, wherein the yarns are provided to the loom at a controlled tension.
9. [Not appealed.]
10. The method of claim 4, further comprising a step of cutting the woven yarns to form a rug.